

12 Eating disorders from a primary care perspective

Kay A Wilhelm and Simon D Clarke

Personal dissatisfaction and interpersonal difficulties are sometimes expressed in excessive attempts to control bodyweight.

In adolescent girls, eating disorders are the third most common disorder behind obesity and asthma. In Western cultures, 0.5% of young women have anorexia nervosa and 2% have bulimia nervosa at some time.¹ Rates for males are 5% to 10% of those for females,¹ but males are increasingly subjected to the same pressures regarding body image that in the past have predisposed females to eating disorders.²

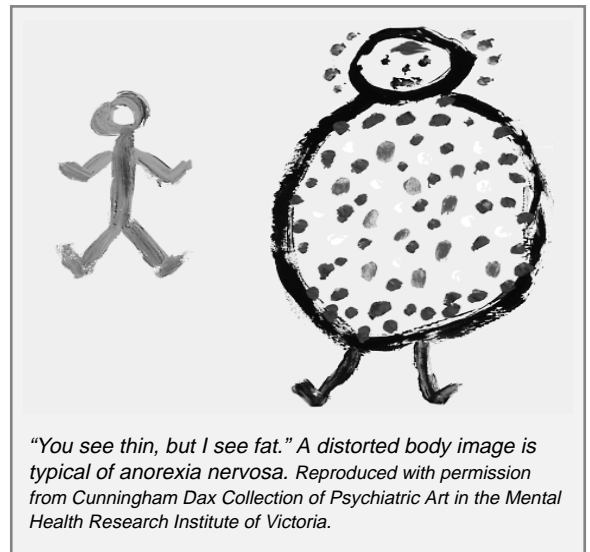
These disorders are only the clinically evident peaks of a widespread dissatisfaction with body image in developed countries, where food is abundantly available and cleverly marketed as a source of fun, comfort and pleasure, while lifestyles are increasingly sedentary. As a result, the proportion of the population that is overweight is increasing. Yet young people are growing up against a backdrop of media images of "ideal" but impossibly thin body shapes. A Sydney study of adolescents aged 11 to 15 reported that 16% of the girls and 7% of the boys had already employed at least one potentially dangerous method of weight reduction, including starvation, vomiting and laxative abuse,³ and a Victorian study of adolescents aged 12 to 17 years classified 38% of girls and 12% of boys as "intermediate" to "extreme" dieters (i.e., at risk of an eating disorder).⁴

The prevalence of eating disorders is directly related to the rates of dieting behaviour.¹ Only a minority of young people who diet go on to develop an eating disorder, but when dieting and the desire to be thin combine with problems with self esteem or interpersonal relationships eating disorders are a possible outcome. This article focuses on anorexia nervosa and bulimia nervosa (defined in Box 1), disorders with the risk of death or serious lasting damage to health (Box 2).

General practitioners are likely to see young people with incipient eating disorders for various reasons,¹⁰ but frequently the patient will not identify eating as a problem. The task for the general practitioner is to identify who is particularly at risk and who has already embarked on disordered eating behaviour likely to lead to medical and psychiatric morbidity. General practitioners are at the front line in early recognition and assessment, with an important part to play in initiating treatment before disordered eating patterns become entrenched.

The psychology of eating

Dieters' eating behaviour is based not on hunger cues but on the premise that they are "too fat" and that losing weight will solve the problem. Thus, "the most insidious effect of dieting is its interference with the perception of normal hunger and satiety signals. To be successful, a dieter must overcome such signals; that is, she must learn not to eat when hungry and to stop eating in response to arbitrary signals that occur well before satiety".¹¹ Dieters find that these "arbitrary signals" are less effective during times of distress or depression, so that chaotic eating behav-



"You see thin, but I see fat." A distorted body image is typical of anorexia nervosa. Reproduced with permission from Cunningham Dax Collection of Psychiatric Art in the Mental Health Research Institute of Victoria.

Synopsis

- ▶ Eating disorders are most common in adolescent girls.
- ▶ The onset of eating disorders is a distress call.
- ▶ Treatment involves a number of interventions ranging from acknowledgement of normal hunger cues, instituting healthy dietary and exercise patterns and improving underlying problems related to self esteem and dysfunctional relationships.
- ▶ Family involvement is vital, particularly for younger patients.
- ▶ Drug treatment is rarely appropriate.
- ▶ General practitioners can be successful in early intervention, with or without partnerships with other professionals. In more entrenched disorders, general practitioners have an important role as treatment coordinators.

Shared Care Liaison Unit, Caritas Centre, St Vincent's Hospital, Sydney, NSW.
Kay Wilhelm, MD, FRANZCP, Psychiatrist.

Adolescent Medical Unit, Westmead Hospital, Sydney, NSW.

Simon D Clarke, MB BS, FCP(Sth Africa), Paediatrician.
 Correspondence: Associate Professor K A Wilhelm, Caritas Centre, 299 Forbes Street, Darlinghurst, NSW 2010.
E-mail: kwillhelm@stvincents.com.au.

ious can occur as they are no longer in touch with the normal hunger and satiety cues.¹¹ Girls who diet tend to have greater misperceptions about their actual size,¹²⁻¹⁴ whereas boys who diet are more likely to have experienced a period of obesity and have a higher rate of gender-identity conflicts.²

While dieters learn not to eat when they are hungry, other people eat when they are not hungry. This can be normal (e.g., when done so as not to offend a host, or because the food looks tasty). It may reflect a state of “emotional hunger”, where food provides solace for feelings of emptiness, distress or anxiety in the context of low self esteem, poor interpersonal skills or interpersonal difficulties.^{13,14}

Binge eating is a form of comfort eating in which a would-be dieter loses control of her or his restricted food intake. In a vicious cycle, anxiety and low self esteem lead to unsustainable efforts to restrict food intake, which in turn leads to binge eating. Binge eating can produce abdominal bloating or weight gain that creates guilt and reinforces difficulties with self image. More strenuous efforts to control diet may follow,

with vomiting, purging and drug use. Some binge eaters will win their battle for control and proceed to anorexia. Others will engage in uncontrolled comfort eating and progress to bulimia. A third group may oscillate between the two.

Adolescence and eating

Adolescence involves several developments that have an impact on eating behaviour: puberty, changing body shape, new sexual feelings and risk-taking urges. An increasing intake of “junk” foods and alcohol during adolescence can lead to obesity, particularly if exercise levels are decreased. Many girls decrease their exercise during the high school years, while, for boys, greater participation in team sports can maintain fitness. Exercise also elevates mood and suppresses appetite,¹⁵ but can become pathological (the “gym junkie”).¹⁶

During this life stage, young people have an inbuilt need to take risks to test their own courage and mortality.¹⁷ Some societies provide initiation rituals and it has been suggested that, in the absence of formal rituals, young people devise informal

1 What are anorexia nervosa and bulimia nervosa?⁵

Anorexia nervosa

- Refusal to maintain the minimal normal weight for age and height (i.e., weight loss [or failure to make expected weight gain during period of growth] leading to a body weight less than 85% of that expected. *Note:* The threshold of 15% below expected body weight, or body mass index of 17.5 or less, has been used in the definition by the World Health Organization’s International Classification of Diseases [ICD-10]). For prepubertal patients the paediatric percentile height-and-weight charts should be used instead.
- Intense fear of gaining weight or becoming fat, even though underweight.
- Disturbance in the way in which one’s body weight or shape is experienced, undue influence of body weight or shape on self evaluation, or denial of the seriousness of the current low body weight.
- Amenorrhoea in postmenarcheal females (i.e., the absence of at least three consecutive menstrual cycles).

Bulimia nervosa

- Recurrent episodes of binge eating characterised by both of the following:
 1. Eating, in a discrete period of time (e.g., within any two hours), more food than most people would eat during a similar period of time and under similar circumstances.
 2. A sense of lack of control over eating during the episode (e.g., a feeling that one cannot stop eating or control what or how much one is eating).
- Recurrent inappropriate compensatory behaviour to prevent weight gain, such as self-induced vomiting, misuse of laxatives, diuretics, enemas, or other medications, fasting or excessive exercise.
- Binge eating and inappropriate compensatory behaviours both occur, on average, at least twice a week for three months.
- Self-evaluation is unduly influenced by body shape and weight.

2 Natural history of anorexia and bulimia

Anorexia nervosa

A review of outcome studies reported that over 20 years 50% of patients make a good recovery (normalisation of three outcome parameters: weight, menstrual pattern and eating behaviour), 30% had a fair outcome (improvement in one or two parameters), and 20% have a poor outcome (no improvement).⁶ However, most patients remain impaired in physical and social functioning, continuing to have disordered eating practices and to be overly conscious of cues related to food and weight.⁶ A 20-year follow-up of anorexic patients reported that 62% had made a good to intermediate recovery, but that mortality was up to 20%.⁷ The most common causes of death are suicide or cardiac arrhythmias.

Bulimia nervosa

The outcome of bulimia nervosa is less well described. In intermediate term studies, about 20% of patients continued to have bulimia after two to five years, while about 25% more still had some bulimic symptoms.⁸ About 30% of bulimic patients had a previous history of anorexia nervosa, but it was rare for those with normal weight to develop anorexia nervosa.

Prognostic factors

For both anorexia nervosa and bulimia nervosa, poorer prognosis is associated with lower initial minimum weight, failure to respond to previous treatments, premonitory disturbed family relationships and severe personality disorder.^{6,9} For anorexia nervosa, the presence of vomiting is a poor prognostic feature and, for bulimia nervosa, the use of purgatives. Factors likely to lead to chronic eating disorders include difficulty giving up “anorexic” thinking patterns and unresolved interpersonal and family difficulties.

We speculate that ongoing entrenched physiological patterns of starvation (e.g., feeling of fullness secondary to delayed gastric emptying) and lowered mood and feelings of helplessness, which may be associated with depression, are also perpetuating factors.

ones involving alcohol, drugs, sex, tattoos and, for some, eating disorders.^{18,19}

Socially accepted “ideals” of thinness, perpetuated by media images, provide a distorted representation of self control, fitness and physical attractiveness to young women.¹² At the same time, young women are reporting increased stress related to social expectations that they can “do anything”. Their personal development is unfolding against a backdrop of increasing materialism, wide but doubtful career choices and high-pressure marketing of “lifestyle products” promoting a superficial view of life.^{12,13} Young men also are experiencing more social pressures towards improved body image, and the shifting role of women in society is having an impact on their sense of identity and career opportunities.²

Eating and control

Disturbed eating behaviours can be seen as an attempt to create tangible goals and a sense of control over part of one’s life in response to confusing messages from society and stressful situations at home, work or school. These behaviours can provide a personal means of testing limits and self control that is so encompassing that peer pressure to be involved in other risky behaviours is side-stepped. They can also divert attention from other important issues, such as marital breakdown between parents, physical or sexual abuse^{12,13} or family dysfunction.^{13,19}

Disordered eating behaviours in one or more members of a family may also represent underlying family problems. Such families are reported to suppress emotions rather than deal assertively with issues. They may “present a strong façade of togetherness but have an underlying theme of avoidance of emotional confrontation concerning difficult issues”.^{20,21}

Risk factors

Individual risk factors for eating disorders include female sex, genetic vulnerability, family history of psychiatric disorder, premorbid obesity, perfectionistic and somewhat obsessional personality style, dysfunctional family and social systems, obsessive-compulsive disorder, preceding depressive disorders, borderline personality disorder (poor sense of identity, mood instability and a tendency to engage in impulsive self-harming or risk-taking behaviour, such as wrist slashing, substance abuse and promiscuity), and a previous history of sexual abuse.^{9,22-26} Precipitating factors may include comments about body shape or fall in self esteem leading to dieting, leaving home, onset of puberty, commencing intimate relationships, loss and illness.

The role of the general practitioner

Diagnosis

Often the first contact is from parents seeking to discuss their suspicions concerning weight loss, amenorrhoea, delayed puberty, irritability, or depression in their child. Friends, teachers, colleagues may also seek advice — virtually anyone but the potential patient! However, patients with incipient eating disorders often consult general practitioners on other health issues in the years preceding onset of their eating dis-

order.¹⁰ With all young people, a clinical history should include such personal habits as eating and diet, exercise, menstruation, sexual activity and drug use. Some questions that may help to identify problem areas are included in Box 3.

The physical dimensions may be overlooked “because patients are perceived as being active, energetic and therefore apparently physically well”²² and patients underplay any physical problems.

In anorexia nervosa, physical examination may reveal hypotension, bradycardia, excessive sensitivity to cold, loss of body fat and lanugo hair (which are adaptations to starvation). Body temperature may be low in really thin patients. Baseline investigations include full blood count, erythrocyte sedimentation rate, tests of liver function, thyroid function and renal function (sodium, potassium, chloride, magnesium, calcium and phosphate), random blood sugar level, chest x-ray and electrocardiogram.^{9,22,24,25,28}

If anorexia nervosa has not been diagnosed previously, the

Case history 1: A girl with anorexia

A 16-year-old girl was taken to her general practitioner by her mother, who was concerned that, after becoming vegetarian the previous year, the girl was now eating all of her meals in her bedroom. She had previously considered herself overweight (BMI of 22) and her father, brother and several friends had made comments about this. She had taken to wearing loose, heavy clothing in the middle of summer. She was more weepy and irritable and her school grades had dropped. She was now 4 kg underweight (BMI of 17) and her periods had stopped six months previously. A restrictive eating pattern was revealed. Routine blood studies gave normal results.

She reported her parents as “intrusive”, and ate in her room because meal times had become “war zones”. She was having less to do with her friends, some of whom now had boyfriends.

She was referred to a local dietitian, who commenced a food diary and sensible eating program and instituted weekly follow-up (including weighing). The general practitioner saw the rest of the family for education and reassurance, including recommendations for reading material. The mother said that she herself had experienced short periods of restricted eating (when stressed and during times of change) starting as a teenager. She then expressed grief for an older daughter who had died in a car accident three years previously. Later, her husband aired his feelings about this loss, stating that he had not felt able to grieve openly for fear of distressing his wife. Discussion with the parents also focused on relieving the anxiety around mealtime and leaving the responsibility for eating with the daughter.

The girl also benefited from 12 sessions of cognitive-behavioural therapy with a clinical psychologist, aimed at changing her dysfunctional ideas about food, eating and body shape. After two months the dietitian was satisfied with the change in types and quantity of food consumed. The girl was eating with her family, her teachers reported that she was concentrating better and seemed happier. Monthly reviews with the general practitioner and dietitian were organised for the next year.

first presentation may be with the physical complications^{24,28} that arise from starvation, idiosyncratic feeding habits, purging and vomiting. Anorexia nervosa may be the underlying diagnosis in patients with unexplained weight loss, amenorrhoea, infertility, osteoporosis, pathological fractures, electrolyte abnormalities, cardiac arrhythmias, cardiac failure or renal failure.²⁸

In bulimia nervosa, physical examination is usually normal and the diagnosis is often overlooked, particularly in boys. In long-established bulimia, there may be enlarged parotid glands, carious teeth (lingual and occlusal surfaces) and acid damage to the nails of middle and index fingers. First line investigations for bulimia nervosa consist of the same electrolyte tests as for anorexia.²²

Treatment in primary care

Most dieters do not go on to develop an eating disorder. As many young people will report at least one or two disordered eating traits, intervention should be considered when there is substantial loss of weight, impairment in daily functioning and/or significant family problems.

Most episodes of disturbed eating behaviour resolve steadily with treatment. The key interventions are:

Forging a therapeutic alliance. The aim behind most interventions is to develop in the patient a coherent sense of self and a positive self image. This can be advanced by establishing a working friendship between doctor and patient. For younger patients, the therapeutic alliance should include the family.

Discussion of concepts of normal eating, dieting and exercise patterns. Young people may have inaccurate or inadequate knowledge about the normal range of weight, eating habits, and nutritional needs; they may have false expectations of dieting and exercise; and they may not have thought about the psychological significance of their attitudes to food (Box 4).

Dietary advice from a doctor or dietitian, with institution of a diet to provide adequate nutrition. Patients need instruction about sensible ways to limit fat intake and strategies to promote weight stability after episodes of disordered eating or after stopping smoking.

Instituting a food diary, looking for dietary pattern and triggers to disordered eating. Food diaries give patients a positive method of observing and controlling their eating behaviour.

Encouraging regular moderate exercise. Those who have previously engaged in compulsive exercise (often at a gym) may need to consider forms of exercise with a different emphasis, such as yoga, t'ai chi or a specialised exercise program.^{24,29} Those who have previously been abused report that weight training, practising martial arts or doing a self defence course increases their feeling of personal control.

Enquiry and advice about drug use. The patient's use of appetite suppressants, tobacco, alcohol and illicit drugs needs to be identified. Appropriate advice includes accurate information about drug effects and risks, and how to recognise and deal with peer pressure.

Setting realistic short term goals and recognising achievements. This will give the encouragement needed to persevere with gradual behavioural change. Target weight is usually calculated on a BMI of 20, but discharge from hospital may be at a lower weight. For those under 16, target weight should be the 25th centile of the age-weight chart for Caucasian girls.

Case history 2: Weight loss as a distress call

A 15-year-old boy of Turkish origin presented with his mother and father, who were worried about his dramatic weight loss over the past six months. He was a quiet boy who spent his lunch hours at school in the library and most of his weekend at home playing computer games. He was previously obese but otherwise well. The parents spoke little English and their son functioned as their interpreter for all business and health transactions. Father was unemployed and pursuing compensation for a "bad back"; mother had chronic irritable-bowel syndrome. The boy spent at least half a day per week out of school taking his parents to various medical or legal appointments. He related as a serious "pseudomature" young man but was not clinically depressed. Examination revealed that he was 20% underweight, with delayed puberty. He was concerned about his personal fitness and stated that he was engaging in strenuous exercise for about three hours per day.

He was referred to a dietitian, whom he saw regularly. Turkish interpreters were provided for the parents, allowing the boy to resume fulltime schooling. On a subsequent visit to the general practitioner, the young man confided his concern about his parents and his relief that they were no longer his sole responsibility. He became more engaged in school and extracurricular activities and slowly gained weight. Participation in soccer and weightlifting obviated his need for the covert exercise program.

3 Questions to ask when an eating disorder is suspected*

- What is your ideal weight?
- What weight would you like to be?
- What was your heaviest weight? Achieved when?
- Why is it so important to lose weight?
- What are the best features of your body?
- When did you have your first period? Last period?
- How regular are your periods?
- Do you ever binge eat? How often? Why?
- What do you eat on a typical day?
- What have you eaten over the past 24 hours?
- What exercise do you do? What do you exercise for?
- What is the timing? (is it taken to compensate for a recent binge?)
- Do you feel "driven" to exercise (e.g., do you continue to exercise while injured or underweight, or while social and work priorities suffer)?
- Do you use smoking (or other drugs) to suppress your appetite or as a substitute for eating?
- Do you vomit after eating?
- Do you use laxatives?

* The dieting disorders chapter of *Management of mental disorders* (listed in recommended reading) includes an "Eating behaviour assessment interview" for full assessment, and a self-report "Eating attitudes test" (EAT-40) with scoring package and interpretative notes. See also Goldenring and Cohen for good general questions for adolescents.²⁷

Providing new challenges and outlets for personal expression. These enhance well-being and may also discourage “risky” behaviours. The secret is finding what suits the individual. This may be drama, art classes or sporting activities.

Planning for relapses. Relapse prevention involves predicting situations likely to lead to relapse (e.g., exam pressure, relationship break-up, or continuing family stress) and planning strategies to meet them.^{13,30} Planning should also address the question of how to cope with a relapse if one occurs (i.e., a relapse must not become a sign of hopelessness and failure).

Some general practitioners will provide counselling for stress management, improving self esteem and revising dysfunctional attitudes to food and eating, often in partnership with a clinical psychologist or dietitian. Whatever the degree of disturbed eating behaviour, the underlying premise in counselling is that eating must become a response to normal physiological cues, which implies changing attitudes to weight and shape and being more in touch with internal messages and needs.

Referral to specialist services (Box 5)

Referral to a psychiatrist, clinical psychologist or other clinician for a course of psychotherapy may be indicated for the following:

- ▶ Individual or group psychological approaches aimed at increasing self esteem, teaching assertion skills and anxiety management techniques.
- ▶ Cognitive therapy^{9,13,24,25} aimed at correcting dysfunctional thinking patterns and assumptions about food, eating and body image.
- ▶ Interpersonal therapy,³¹ a short term psychotherapy aimed at identifying and improving “underlying difficulties” for which eating disorders constitute a maladaptive solution. Other psychotherapies aim to improve insight into interpersonal difficulties and motivation.
- ▶ Family therapy^{9,24} aimed at teaching families how to ventilate emotion, set limits, resolve arguments and solve problems more effectively. Parents can learn to understand the difficulties of the affected child and to avoid adopting a view of the world where success or failure in any endeavour is measured in terms of weight, food and self control.
- ▶ Specific counselling to deal with issues of sexual identity and sexual abuse where indicated.

Family therapy is effective for younger adolescents with a disorder of recent onset, and individual cognitive, interpersonal or insight-directed therapy for older adolescents and adults. There are also group programs over a period of weeks or in a day-hospital setting, which generally offer cognitive therapy. The length and complexity of treatment are determined by the patient’s age, duration of illness and motivation. Further information is available from several sources and a comprehensive review of treatment practices is available.⁹

If referral is made to a dietitian or eating disorders unit, the general practitioner can act as the treatment coordinator, providing regular medical assessment and support and counselling of patient and family. As coordinator, the general practitioner should clarify the tasks of various team members

4 Food-related communication

Food has many uses other than simply stopping hunger pangs.

- ▶ From childhood, we associate food with comfort and reward (e.g., use of treats when “grizzly” or for successful toilet training).
- ▶ Refusal of food can communicate distress (e.g., “Is anyone interested in what I’m feeling?” or “I have no control over anything else but I can control this”).
- ▶ The statement “I feel fat” is a misidentification of a feeling. It may have many meanings (e.g., “Something is wrong with me”; “I feel stressed”; “I have failed my own expectations”).
- ▶ It is often safer to make disparaging comments about one’s body (as an object) than to express other difficult emotions. “I’m not hungry” may mean “I am angry with my father” or “I have something which is difficult to discuss”. “I feel gross and ugly” may translate as “I am resentful of my sister” or “I’m worried he won’t like me”.
- ▶ The real meanings imply problems with self-esteem or with being appropriately assertive, which are projected onto the body.

5 When is specialist referral necessary?

- ▶ For a second opinion or specialist assessment when the clinical picture is uncertain
- ▶ Self-help or first-line treatments seem to be failing
- ▶ Disturbed eating behaviour is entrenched and out of control
- ▶ Continuing weight loss and dehydration despite treatment
- ▶ Concurrent psychiatric disturbance, such as depression, obsessive-compulsive disorder or severe personality disorder
- ▶ Severe family dysfunction or distress

to ensure that patient, family and professionals are all “on the same team”, with a clear management plan available to all.

Whether treatment is given in or out of hospital, the family need to understand that the goal is not to simply reach a target or “ideal” weight and that a more holistic approach is generally required. They may need to be informed that they will be asked to participate in initial assessment or ongoing psychotherapy (particularly for adolescent girls). They may need encouragement, particularly if there is any “unfinished business” (such as divorce, unresolved grief, and ongoing dissent) or family secrets (such as previous adoption or sexual abuse) that are difficult to confront.

A psychiatric opinion may be sought for:

- ▶ Assessment and treatment of underlying psychiatric problems. Mood disorders tend to be commoner in young women; in young men, alcohol and drug abuse or obsessional features tend to be commoner comorbid problems.
- ▶ Advisability of drug therapy. Antidepressants have little place in treating anorexia nervosa, where depression is generally related to the degree of weight loss and responds to normalisation of weight. However, if depression precedes

Case history 3: Anorexia and depression

A 19-year-old girl had recently started work and left home to live in shared accommodation. She presented with tiredness, weepiness and erratic sleeping. She grudgingly admitted to self-induced vomiting, which had been occasional in the past but much more regular since leaving home. She stated that she could no longer control her vomiting and had started taking up to one packet of laxatives per day. She had no physical or biochemical abnormalities.

She agreed to take a selective serotonin reuptake inhibitor, which led to rapid improvement in mood and gradual improvement in sleep pattern. The general practitioner showed her a book outlining a self help program for binge eating that she was prepared to follow under general practitioner supervision. She understood that dietitian referral was an option, but preferred to "give it a go" by herself first. She also undertook to stop taking laxatives. She was encouraged to use a problem-solving approach to her current difficulties, as outlined in the self help book.

She then decided to break up a current relationship with a man because "it isn't going anywhere" and talked to her new boss about work-related difficulties. Subsequently, she felt happier about her ability to cope. She was seen weekly for the first month and then fortnightly for three months.

the onset of anorexia, antidepressants may have much greater value. They can also be helpful for obsessional ruminations or panic disorder (when present). Antidepressants can be of benefit for treatment of bingeing, with or without overt depression. The newer non-tricyclic antidepressants (selective serotonin reuptake inhibitors, serotonin-noradrenaline reuptake inhibitors, selective reversible inhibitors of monoamine type A) are the most appropriate because they have a good side effect profile (i.e., they are not sedating and have low cardiotoxicity, which is important in the context of suicidal ideation and electrolyte disturbance).^{9,32}

Over the last decade there has been a trend away from prolonged hospital admissions to more flexible treatment programs which may be inpatient, daypatient or outpatient. However, common reasons for hospital admission for eating disorders include BMI below 15 with rapid weight loss, uncontrollable vomiting, medical complications (e.g., cardiac abnormalities, bradycardia less than 40/minute, fainting, hypotension less than 60 mm Hg systolic), suicidal behaviour, lack of response to outpatient treatment in a very underweight patient,²⁰ and extreme family distress.

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Recommended reading for general practitioners

- ▶ Ball J, Butow P, Place F. *When eating is everything: How to overcome your eating problems and change your life*. Sydney: Doubleday, 1991. *A comprehensive and readable approach to anorexia and bulimia, also encouraging growth of personal creativity through diary writing.*
- ▶ Fairburn C. *Overcoming binge eating*. New York: Guildford Press, 1996. *An excellent structured approach to binge eating. This book, and the one by Ball, Butow and Place, provides excellent self help programs with which the general practitioner should be familiar before supervising such a program.*
- ▶ Treatment Protocol Project, World Health Organization. *Management of mental disorders. Chapter 6. Dieting disorders. Section 6.3 has some excellent resource materials on eating disorders. This book also provides the material for provision of a supervised program.*
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